

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method for transmitting DSI ~~and NDSI~~ over a communication link of a communication network, the method comprising the steps of:

transmitting an initial DSI after applying a delay to the initial DSI where such delay is based on a determined periodicity parameters of received DSI.

2. (Canceled)

3. (Currently Amended) The method of claim 1 ~~[[2]] comprising transmitting NDSI over the link of the communication network~~, wherein the delay is further based on a defined length NDSI being transmitted.

4. (Original) The method of claim it 1 where the step of transmitting DSI comprises:

transmitting and DSI in a non-fragmented manner when there are no DSI to be transmitted;

monitoring for any received DSI;

determining whether a received DSI is an initial DSI;

transmitting the received DSI as per its periodicity when such received DSI is not an initial DSI; and

performing a fragmentation operation for NDSI to be transmitted or for NDSI being transmitted.

5. (Original) The method of claim 4 wherein the fragmentation operation performed is a dynamic fragmentation operation.
6. (Original) The method of claim 4 where the step of determining whether a received DSI is an initial DSI is based on information received from communication equipment.
7. (Original) The method of claim 4 where the step of transmitting the DSI as per its periodicity is based on information received from communication equipment.
8. (Original) The method of claim 6 where the communication equipment is an IAD.
9. (Original) The method of claim 6 where the communication equipment is subscriber equipment.
10. (Original) The method of claim 7 wherein the communication equipment is an IAD.
11. (Original) The method of claim 7 where the communication equipment is subscriber equipment.
12. (Original) The method of claim 1 further comprising the steps of:  
maintaining a list of transmission times for received initial DSI;  
establishing a transmission time for each received initial DSI; and  
updating the list when an initial DSI is received or when a DSI flow is terminated.

13. (Original) An apparatus for transmitting DSI and NDSI over a communication link of a communication network where the apparatus applies a delay to received initial DSI based on a determined periodicity of the received DSI and a defined length of NDSI being transmitted.

14. (Original) The apparatus of claim 13 configured as an IAD coupled to subscriber equipment and to an access network.

15. (Original) The apparatus of claim 13 configured as part of host equipment where such host equipment is coupled to an access network and to a packet based communication network.